Philips MASTER LEDlamps

Feel what light can do

Range Update 2011

www.philips.com/masterled

PHILIPS

sense and simplicity

3 year guarantee

MASTER LEDspot LV AR111 G53

Ideal solution for spot lighting in shops

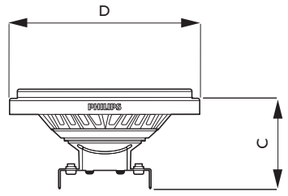
- lower energy consumption: 10 W → 50 W
- retrofittable
- lifetime of 45.000 hours
- patented intelligent driver
- clearly defined beam spread
- not dimmable
- available in 2700 K and 3000 K
- beam angles of 24° and 40°
- UV- and IR-free light for less heat and protection for heat-sensitive objects
- free of mercury and hazardous materials
- lightweight (122g) to allow for a broad range of standard halogen AR111 applications, such as track lighting

Product benefits:

- long lifetime
- warm white light
- good light distribution
- no IR- and UV radiation
- short payback period
- up to 80% energy saving compared with halogen lamps
- lower maintenance cost
- transformer compatibility: broad compatibility with existing electronic and electromagnetic halogen transformers (est. 99%; IC controlled transformers are the only potential exception)

Technical specification

	Product description MASTER LEDspot LV	Wattage	Comparable Halogen Wattage	Socket	Bulb shape	Beam intensity	Beam angle	Lifetime	Dimmable	Units per pack	Colour rendering index	Colour temp.	EOC 8718291
		(W)	(W)			(cd)	(°)	(hours)				K	
new	AR111 2700K	10	50	G53	AR111	3200	24	45,000	no	6	>80	2700	11935700
new	AR111 2700K	10	50	G53	AR111	1150	40	45,000	no	6	>80	2700	11939500
new	AR111 3000K	10	50	G53	AR111	3370	24	45,000	no	6	>80	3000	11937100
new	AR111 3000K	10	50	G53	AR111	1210	40	45,000	no	6	>80	3000	11941800



10 W 10 W

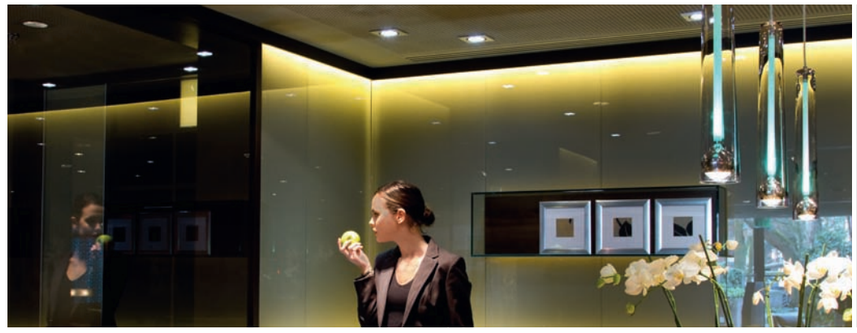
Dimensions (mm) / weight

Product	C	D	Weight
AR111/G53	60.5	111	0.122

3 year guarantee

MASTER LEDspots MV GU10

The perfect replacement for mains voltage halogen spots



Features/applications:

- low energy consumption: 3/4 W → 35 W, 7 W → 50 W
- LED lamps suitable for simple (retrofit) replacement of halogen lamps (230 V-240 V)
- available in beam angles of 25° and 40°
- available in different colour shades of white (2700 K, 3000 K or 4000 K)
- dimmable (except the 3 W version)
- very good colour rendering
- temperature range: -20° C to +45° C ambient temperature
- suitable for voltage fluctuations of +/- 10%
- suitable for indoor applications in open luminaires (with an open/free air gap of min. 10 mm)
- for accent and general lighting e.g. hotels, shops and offices

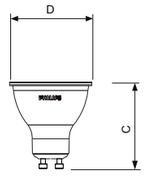
Product benefits:

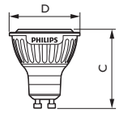
- long lifetime
- 80%-90% energy saving
- dimmable with leading edge dimmers *(we recommend a maximum LEDlamp load of 10% of the dimmers maximum rated wattage)*
- good light distribution
- no IR- and UV radiation, low heat radiation
- high quality, robust housing
- minimum maintenance costs
- short payback time

Technical specification

	Product description MASTER LEDspot MV	Wattage	Comparable Halogen Wattage	Socket	Beam intensity	Lifetime	Dimmable*	Units per pack	Colour rendering index	Colour temp.	EOC 8727900	EOC 8718291
		(W)	(W)		(cd)	(hours)				K		
	3-35W GU10 2700K 25D	3	35	GU10	850	35,000	no	10	>80	2700	89788300	
new	D 4-35W GU10 2700K 25D	4	35	GU10	600	25,000	yes	10	>80	2700		12264700
new	D 4-35W GU10 2700K 40D	4	35	GU10	310	25,000	yes	10	>80	2700		12268500
new	D 4-35W GU10 3000K 25D	4	35	GU10	630	25,000	yes	10	>80	3000		11899200
new	D 4-35W GU10 3000K 40D	4	35	GU10	400	25,000	yes	10	>80	3000		11901200
	D 7-50W GU10 4000K 25D	7	50	GU10	1400	40,000	yes	6	>80	4000	86043600	
	D 7-50W GU10 4000K 40D	7	50	GU10	650	40,000	yes	6	>80	4000	86045000	
	D 7-50W GU10 3000K 25D	7	50	GU10	1400	40,000	yes	6	>80	3000	86039900	
	D 7-50W GU10 3000K 40D	7	50	GU10	650	40,000	yes	6	>80	3000	86041200	
	D 7-50W GU10 2700K 25D	7	50	GU10	1100	40,000	yes	6	>80	2700	86033700	
	D 7-50W GU10 2700K 40D	7	50	GU10	430	40,000	yes	6	>80	2700	86035100	

* We refer to the site www.philips.com/masterled for the latest information about dimming MASTER LED lamps.





7 W 3 W 4 W 7 W 3 W 4 W

Dimensions (mm) / weight

Product	C	D	Weight
7W	81	50	0.116
3W	55.5	50	0.068
4W	55.7	50	0.050

3 year guarantee

MASTER LEDspots LV MR16 GU5.3

The perfect replacement for low voltage halogen spots

Features/applications:

- low energy consumption: 4 W → 20 W, 7 W → 35 W, 10 W → 50 W
- suitable for replacement (retrofit) of low voltage MR16 halogen lamps with GU5.3 socket
- available in beam angles of 15°, 24°, 36° and 60°
- dimmable (except the 4-20 W)
- available in 2700 K or 3000 K
- very good colour rendering
- temperature range: -20° C to +45° C ambient temperature
- ideal for accent lighting in hotels, hospitals, shops and museums (e.g. floors, elevators, displays) in open luminaires (with an open/free air gap of min. 10 mm)
- broadly compatible with existing electromagnetic & electronic halogen transformers
- long lifetime
- 80% energy saving
- no IR- and UV radiation; ideal to illuminate heat sensitive objects
- air movement mechanism (active fan cooling) with very low sound levels (for 7-35 W and 10-50 W)
- minimum maintenance costs
- short payback time

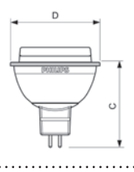
Technical specification

	Product description MASTER LEDspot LV	Wattage	Comparable Halogen Wattage	Socket	Bulb shape	Beam intensity	Beam angle	Lifetime	Dimmable*	Units per pack	Colour rendering index	Colour temp.	EOC 8727900	EOC 8718291
		(W)	(W)			(cd)	(°)	(hours)				K		
	4-20W 2700K MR16 24D TC	4	20	GU5.3	MR16	700	24	45,000	no	10	>80	2700	89822400	
new	4-20W 2700K MR16 36D TC	4	20	GU5.3	MR16	470	36	45,000	no	10	>80	2700		11903600
	4-20W 3000K MR16 24D TC	4	20	GU5.3	MR16	720	24	45,000	no	10	>80	3000	89824800	
new	4-20W 3000K MR16 36D TC	4	20	GU5.3	MR16	500	36	45,000	no	10	>80	3000		11905000
	D 7-35W 2700K MR16 15D	7	35	GU5.3	MR16	3210	15	40,000	yes	10	>80	2700		12239500
	D 7-35W 2700K MR16 24D	7	35	GU5.3	MR16	1450	24	40,000	yes	10	>80	2700		10241800
new	D 7-35W 2700K MR16 36D	7	35	GU5.3	MR16	763	36	40,000	yes	10	>80	2700		11907400
new	D 7-35W 2700K MR16 60D	7	35	GU5.3	MR16	320	60	40,000	yes	10	>80	2700		11913500
	D 7-35W 3000K MR16 15D	7	35	GU5.3	MR16	3300	15	40,000	yes	10	>80	3000		12243200
	D 7-35W 3000K MR16 24D	7	35	GU5.3	MR16	1550	24	40,000	yes	10	>80	3000		12245600
new	D 7-35W 3000K MR16 36D	7	35	GU5.3	MR16	810	36	40,000	yes	10	>80	3000		11909800
new	D 7-35W 3000K MR16 60D	7	35	GU5.3	MR16	341	60	40,000	yes	10	>80	3000		11911100
	D 10-50W 2700K MR16 15D	10	50	GU5.3	MR16	4000	15	30,000	yes	10	>80	2700		12248700
	D 10-50W 2700K MR16 24D	10	50	GU5.3	MR16	1900	24	30,000	yes	10	>80	2700		12253100
new	D 10-50W 2700K MR16 36D	10	50	GU5.3	MR16	960	36	30,000	yes	10	>80	2700		11915900
	D 10-50W 3000K MR16 15D	10	50	GU5.3	MR16	4200	15	30,000	yes	10	>80	3000		12255500
	D 10-50W 3000K MR16 24D	10	50	GU5.3	MR16	1930	24	30,000	yes	10	>80	3000		12258600
new	D 10-50W 3000K MR16 36D	10	50	GU5.3	MR16	1010	36	30,000	yes	10	>80	3000		11917300

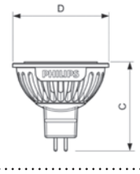
* We refer to the site www.philips.com/masterled for the latest information about dimming MASTER LED lamps.

7 W
10 W

4 W



7 W
10 W



4 W

Dimensions (mm) / weight (kg)

Product	C	D	Weight
4W	46	50	0.032
7W 10W	53.7	50	0.044

3 year guarantee

MASTER LEDspot LV MR11 GU4

Ideal solution for display case / spot lighting in shops

Features/applications:

- low energy consumption: 4 W → 20 W
- LED lamps suitable for simple (retrofit) replacement of low voltage MR11 (12 V) halogen lamps
- broadly compatible with existing electromagnetic & electronic halogen transformers
- MR11 lamps with GU4 socket
- available in 2700 K and 4000 K
- beam angle of 24°
- not dimmable
- very good colour rendering
- ideal to create eye-catching displays (for e.g. in jewellery stores)

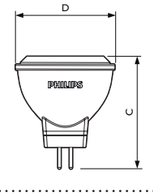
Product benefits:

- long lifetime
- 80% energy saving
- good light distribution
- no IR- and UV radiation; ideal to illuminate heat sensitive objects
- minimum maintenance costs
- short payback period

Technical specification

	Product description MASTER LEDspot LV	Wattage	Comparable Halogen Wattage	Socket	Bulb shape	Beam intensity	Beam angle	Lifetime	Dimmable	Units per pack	Colour rendering index	Colour temp.	EOC 8718291
		(W)	(W)			(cd)	(°)	(hours)				K	
new	4W GU4 2700K MR11 24D	4	20	GU4	MR11	600	24	25,000	no	12	>80	2700	11923400
new	4W GU4 4000K MR11 24D	4	20	GU4	MR11	700	24	25,000	no	12	>80	4000	11925800

4 W



4 W

Dimensions (mm) / weight

Product	C	D	Weight
MR11/GU4	40	35	0.027

3 year guarantee

MASTER LEDcapsule LV G4

Ideal solution for task lighting and decorative applications

Features/applications:

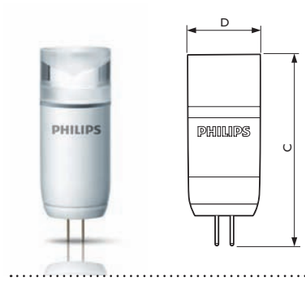
- low energy consumption: 2,5 W → 10 W
- retrofittable (note: product will not fit in all existing luminaires; compared to a halogen capsule this is not always a perfect fit solution)
- lifetime of 35,000 hours
- patented intelligent driver
- removable lens to customize light to different applications: with lens for standard "light-all-around" applications, or removed for directional spot-lighting applications
- UV- and IR-free light for less heat and protection for heat-sensitive objects
- free of mercury and hazardous materials

Product benefits:

- long lifetime
- good light distribution
- short payback period
- warm white light
- up to 75% energy saving compared with halogen lamps
- lower maintenance costs
- transformer compatibility: broad compatibility with existing electronic and electromagnetic halogen transformers (est. 99%; IC controlled transformers are the only potential exception)

Technical specification

	Product description MASTER LEDcapsule LV	Wattage	Comparable Halogen Wattage	Socket	Lumen output	Beam angle	Lifetime	Dimmable	Units per pack	Colour rendering index	Colour temp.	EOC 8718291
		(W)	(W)		Lm	(°)	(hours)				K	
new	G4 2700K	2,5	10	G4	100	360	35,000	no	12	>80	2700	11933300



2,5 W

2,5 W

Dimensions (mm) / weight

Product	C	D	Weight
Capsule G4	49.8	18.7	0.018

Note: not a perfect fit retrofit size

3 year guarantee

MASTER LEDbulbs

Dimmable solutions for general lighting

Features/applications:

- low energy consumption: 6 W → 25 W, 8 W → 40 W, 12 W → 60 W
- easy (retrofit) replacement of incandescent bulbs
- warm white light of 2700 K - truly incandescent-like
- very good colour rendering
- dimmable
- temperature range: -20° C to +45° C ambient temperature
- for indoor applications in open luminaires (with an open/free air gap of min. 10 mm)
- suitable for general lighting/ambiance creation in e.g. hotels, restaurants, shops and offices
- energy class A

Product benefits:

- long lifetime
- 80% energy saving
- incandescent-like light distribution
- dimmable
- no IR- and UV radiation, low heat radiation
- minimium maintenance costs
- short payback period

Technical specification

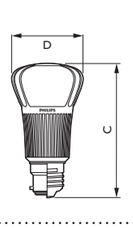
Product description MASTER LEDbulb	Wattage	Comparable incandes-cent	Socket	Bulb shape	Light output	Beam angle	Lifetime	Dimmable*	Units per pack	Colour rendering index	Colour temp.	EOC 8727900
	(W)	(W)			lm	(°)	(hours)				K	
6W E27 2700K 230V A55	6	25	E27	A55	250	>180	45,000	yes	6	>80	2700	85353700
8-40W E27 2700K 230V A60	8	40	E27	A60	470	>250	25,000	yes	6	>80	2700	90048400
8-40W B22 2700K 230V A60	8	40	B22	A60	470	>250	25,000	yes	6	>80	2700	90050700
D 12-60W E27 2700K A60	12	60	E27	A60	806	>300	25,000	yes	6	>80	2700	93448900
D 12-60W B22 2700K A60	12	60	B22	A60	806	>300	25,000	yes	6	>80	2700	93450200

* We refer to the site www.philips.com/masterled for the latest information about dimming MASTER LED lamps.

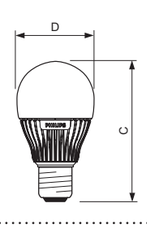
12 W

8 W

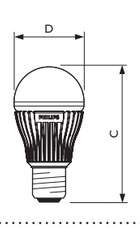
6 W



12 W



8 W



6 W

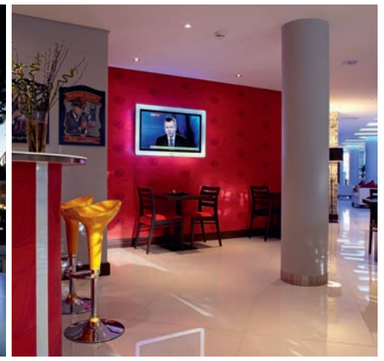
Dimensions (mm) / weight

Product	C	D	Weight
8W	108	60	0.120
6W	106	55	0.135
12W E27	108	58	0.182
12W B22	108	58	0.182

3 year guarantee

MASTER LEDspots PAR

The energy saving alternative for lighting in public areas



Features/applications:

- low energy consumption: 7 W → 50 W, 12 W → 75 W, 16 W → 80 W, 18 W → 100 W
- dimmable (except PAR38 OD)
- efficient replacement LED lamps of halogen or incandescent PAR lamps
- very good colour rendering
- PAR20, PAR30 and PAR38 for indoor use in open luminaires (ventilated, min. 10 mm free air gap)
- PAR38 OD for outdoor use (please check the packaging guidelines for outdoor installation requirements)
- especially suitable for public areas like lobbies, corridors and stairwells

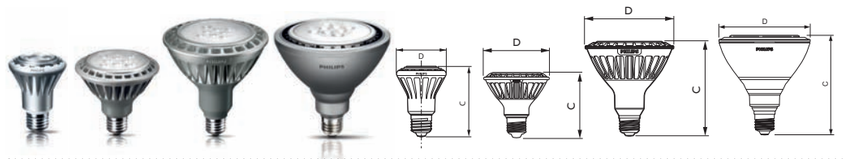
Product benefits

- long lifetime
- 80% energy saving
- good colour rendering
- no IR- and UV radiation
- minimium maintenance costs

Technical specification

	Product description MASTER LEDspot	Wattage	Comparable Wattage	Socket	Bulb shape	Beam intensity	Beam angle	Lifetime	Dimmable*	Units per pack	Colour rendering index	Colour temp.	EOC 8727900	EOC 8718291
		(W)	(W)			(cd)	(°)	(hours)				K		
	D 7-50W 2700K PAR20 25D	7	50	E27	PAR20	1000	25	45,000	yes	6	>80	2700	93398700	
	D 7-50W 2700K PAR20 40D	7	50	E27	PAR20	450	40	45,000	yes	6	>80	2700	93406900	
	D 7-50W 3000K PAR20 25D	7	50	E27	PAR20	1050	25	45,000	yes	6	>80	3000	93400700	
	D 7-50W 3000K PAR20 40D	7	50	E27	PAR20	500	40	45,000	yes	6	>80	3000	93408300	
	D 7-50W 4000K PAR20 25D	7	50	E27	PAR20	1200	25	45,000	yes	6	>80	4000	93402100	
	D 7-50W 4000K PAR20 40D	7	50	E27	PAR20	550	40	45,000	yes	6	>80	4000	93410600	
new	12W 2700K 230V PAR30S 25D	12	75	E27	PAR30S	2250	25	45,000	yes	6	>80	2700		11927200
new	18W 2700K 230V PAR38 25D	18	100	E27	PAR38	3400	25	45,000	yes	6	>80	2700		11929600
	16W 2700K 230V PAR38 OD	16	80	E27	PAR38	2800	25	22,000	no	10	>80	2700	85303200	

* We refer to the site www.philips.com/masterled for the latest information about dimming MASTER LED lamps.



7 W 12 W 18 W 16 W 7 W 12 W 18 W 16 W

Dimensions (mm) / weight

Product	C	D	Weight
PAR20	90.2	63.7	0.156
PAR30S	91	92	0.290
PAR38	133	121.5	0.525
PAR38 OD	131	121.5	0.686

1 year guarantee

Novallure candles and lusters

Eye-catching design for chandeliers

Features/applications:

- low energy consumption: 2 W → 10 W, 3 W → 15 W
- LED lamps for (retrofit) simple replacement of existing incandescent or halogen candle and luster lamps
- available in E14, E27 and B15 socket
- dimmable (3 W versions only)
- good colour rendering
- for indoor applications in open luminaires (open/free air gap of min. 10 mm)
- applications in hotels, restaurants, homes and historical buildings
- beautifully sparkling light for chandeliers, wall sconces and other decorative luminaires
- available in frosted (FR) and clear (CL) versions to suit any application

Product benefits:

- lifetime: 20,000 hours
- 80% energy saving
- good colour rendering
- no IR and UV radiation, low heat radiation
- low maintenance costs
- sparkling light, directed radially

Technical specification

	Product description Novallure	Wattage	Comparable incandescent	Socket	Bulb shape	Lumen output	Lifetime	Dimmable*	Units per pack	Colour rendering index	Colour temp.	EOC 8727900	EOC 8719291
		(W)	(W)			(lm)	(hours)				K		
	D 3W E14 2700K 230V B35 CL	3	15	E14	B35	136	20,000	yes	10	>80	2700	93456400	
	D 3W E14 2700K 230V B35 FR	3	15	E14	B35	136	20,000	yes	10	>80	2700	93458800	
	D 3W E14 2700K 230V P45 CL	3	15	E14	P45	136	20,000	yes	10	>80	2700	93468700	
	D 3W E14 2700K 230V P45 FR	3	15	E14	P45	136	20,000	yes	10	>80	2700	93470000	
	D 3W E27 2700K 230V P45 CL	3	15	E27	P45	136	20,000	yes	10	>80	2700	93472400	
	D 3W E27 2700K 230V P45 FR	3	15	E27	P45	136	20,000	yes	10	>80	2700	93474800	
new	D 3W B15 2700K 230V B35 CL	3	15	B15	B35	136	20,000	yes	10	>80	2700		12731400
	2W E14 2700K 230V B35 CL	2	10	E14	B35	86	20,000	no	10	>80	2700	93452600	
	2W E14 2700K 230V B35 FR	2	10	E14	B35	86	20,000	no	10	>80	2700	93454000	
	2W E14 2700K 230V P45 CL	2	10	E14	P45	86	20,000	no	10	>80	2700	93460100	
	2W E14 2700K 230V P45 FR	2	10	E14	P45	86	20,000	no	10	>80	2700	93462500	

* We refer to the site www.philips.com/masterled for the latest information about dimming MASTER LED lamps.

Novallure 3 W Novallure 2 W Novallure 3 W Novallure 2 W

Dimensions (mm) / weight

Product	C	D	Weight
candle 3-15W	101	35	0.034
luster 3-15W E14	83.5	45	0.032
luster 3-15W E27	92	46	0.032
candle 3-15W B15	98	35	0.041
candle 2-10W	97.5	35	0.035
luster 2-10W	75.5	45	0.033

Pay-back comparison LED - Halogen/Incandescent

Calculation based on: usage hr/day = 16, usage hrs/year = 6000, energy costs £ 0.10/kWh, labour costs = £ 2.-

	Traditional	LED
		page 2
	Standard halogen Dichroic 50 W MV	MASTER LEDspot LV 10-50 W AR111 G53
Lifetime of the lamp (hours)	4,000	45,000
Yearly energy costs	£30.00	£6.00
Yearly replacement cost	£3.00	£0.27
Initial costs per piece	£8.00	£55.00
Total costs per year	£45.00	£13.60
Saving per year	£ 31.40	
Pay-back time	18 months	

	Traditional	LED
		page 3
	EcoHalo Twist 35 W GU10 240 V MR16	MASTER LEDspot MV 4-35 W GU10
Lifetime of the lamp (hours)	2,000	25,000
Yearly energy costs	£21.00	£2.40
Yearly replacement cost	£6.00	£0.48
Initial costs per piece	£1.20	£20.00
Total costs per year	£30.00	£7.68
Saving per year	£ 22.92	
Pay-back time	10 months	

	Traditional	LED
		page 4
	EcoHalo 35 W GU5.3 12 V MR16	MASTER LEDspot LV MR16 7-35 W
Lifetime of the lamp (hours)	2,000	40,000
Yearly energy costs	£21.00	£4.20
Yearly replacement cost	£6.00	£0.30
Initial costs per piece	£1.00	£25.00
Total costs per year	£30.00	£8.25
Saving per year	£ 21.75	
Pay-back time	13 months	

	Traditional	LED
		page 5
	Halogen 20 W GU4 12 V MR11	MASTER LEDspot LV 4-20 W MR11
Lifetime of the lamp (hours)	1,000	25,000
Yearly energy costs	£12.00	£2.40
Yearly replacement cost	£12.00	£0.48
Initial costs per piece	£1.00	£24.00
Total costs per year	£30.00	£8.64
Saving per year	£ 21.36	
Pay-back time	12 months	

	Traditional	LED
		page 6
	Halo Caps 10 W G4 12 V	MASTER LEDcapsule LV 2-10 W 2700 K
Lifetime of the lamp (hours)	2,000	35,000
Yearly energy costs	£6.00	£1.50
Yearly replacement cost	£6.00	£0.34
Initial costs per piece	£1.50	£15.00
Total costs per year	£16.50	£4.41
Saving per year	£ 12.09	
Pay-back time	13 months	

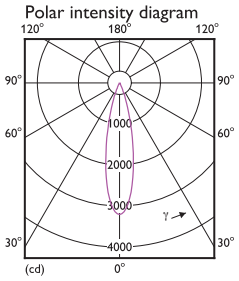
	Traditional	LED
		page 7
	Standard 60 W E27 240 V A55	MASTER LEDbulb 12-60 W
Lifetime of the lamp (hours)	1,000	25,000
Yearly energy costs	£36.00	£7.20
Yearly replacement cost	£12.00	£0.48
Initial costs per piece	£1.50	£48.00
Total costs per year	£57.00	£19.20
Saving per year	£ 37.80	
Pay-back time	14 months	

	Traditional	LED
		page 8
	PAR38 80 W E27 240 V	MASTER LEDspot PAR 38 18-100 W
Lifetime of the lamp (hours)	2,000	45,000
Yearly energy costs	£60.00	£10.80
Yearly replacement cost	£6.00	£0.27
Initial costs per piece	£6.00	£60.00
Total costs per year	£84.00	£19.07
Saving per year	£ 64.93	
Pay-back time	10 months	

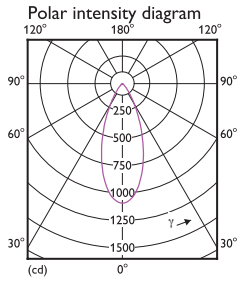
	Traditional	LED
		page 9
	Standard 15 W E14 230 V B35	Novallure LED candle 3-15 W
Lifetime of the lamp (hours)	1,000	20,000
Yearly energy costs	£9.00	£1.80
Yearly replacement cost	£12.00	£0.60
Initial costs per piece	£0.40	£14.00
Total costs per year	£23.40	£6.60
Saving per year	£ 16.80	
Pay-back time	10 months	

Photometric diagrams for new products

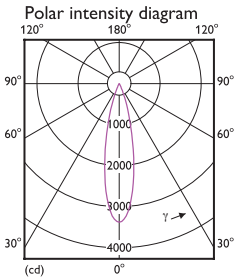
The polar diagram indicates the output distribution of a light source over a range of angles.



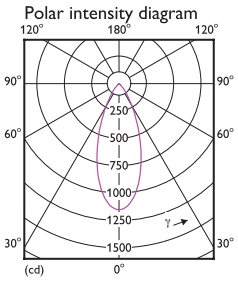
10-50W AR111 2700K 24D



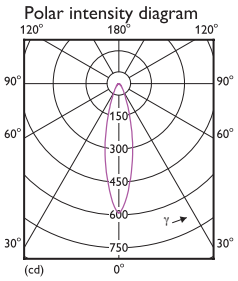
10-50W AR111 2700K 40D



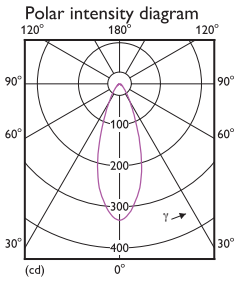
10-50W AR111 3000K 24D



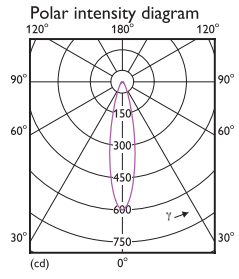
10-50W AR111 3000K 40D



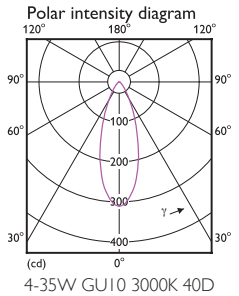
4-35W GU10 2700K 25D



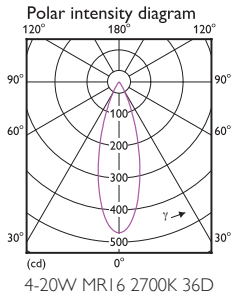
4-35W GU10 2700K 40D



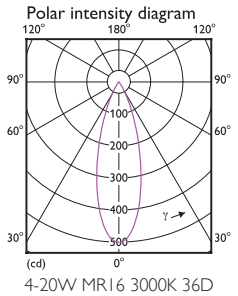
4-35W GU10 3000K 25D



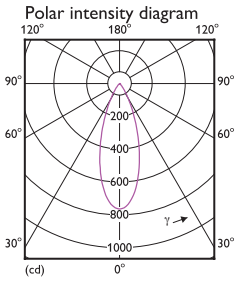
4-35W GU10 3000K 40D



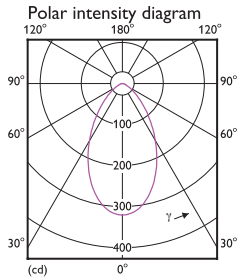
4-20W MR16 2700K 36D



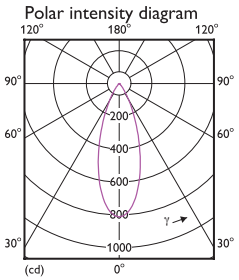
4-20W MR16 3000K 36D



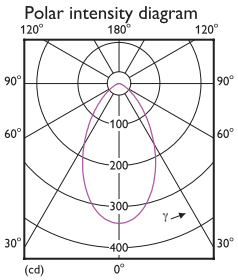
7-35W MR16 2700K 36D



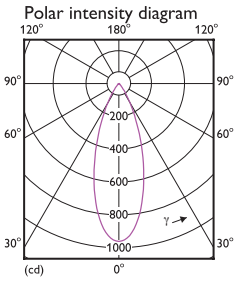
7-35W MR16 2700K 60D



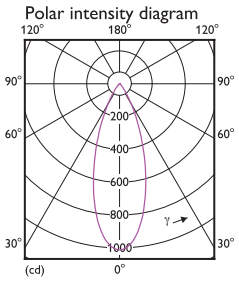
7-35W MR16 3000K 36D



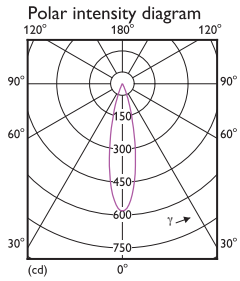
7-35W MR16 3000K 60D



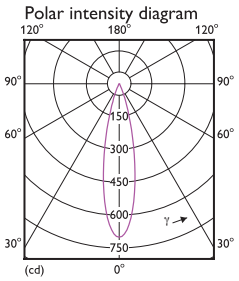
10-50W MR16 2700K 36D



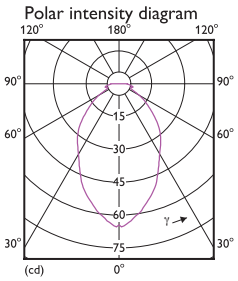
10-50W MR16 3000K 36D



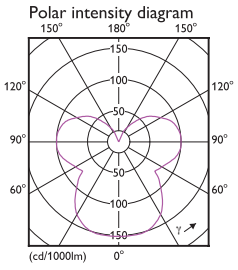
4-20W MR11 2700K 24D



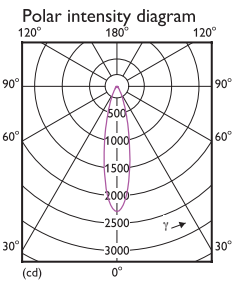
4-20W MR11 4000K 24D



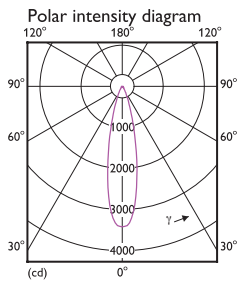
2.5-10W G4 2700K 360D without lens



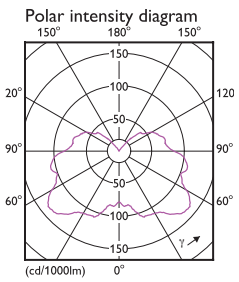
2.5-10W G4 2700K 360D with lens



12-75W PAR30S 2700K 25D



12-75W PAR38 2700K 25D



3-15W B15 2700K B35

© 2011 Koninklijke Philips Electronics N.V.
All rights reserved. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice. No liability will be accepted by the publisher for any consequence of its use. Publication thereof does not convey nor imply any license under patent or other industrial or intellectual property rights.

Document order number: 3222 635 54627
Data is subject to change.
03/2011

www.philips.com/masterled
www.philips.co.uk/lighting
Email: lighting.uk@philips.com